

ABSTRACT OF THE DISCLOSURE

A plurality of circuit patterns are written by a small number of charged particle beams with a high dimension controllability without using a mask.

A desired charge quantity is irradiated on a desired point on a sample by performing irradiation on a charged particle beam section in a superposing manner in order to obtain a predetermined exposure intensity by the charged particle beams constituting a plurality of charged particle beam groups. In addition, the charged particle beams are used, in which current quantities of a plurality of the charged particle beams are made to have a weighted gradation, the desired charged quantity is irradiated, and thus a desired exposure dimension is obtained.

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